

## Cropland Interpretations

### **Crop Yield**

The average yields per acre of principal crops under a high level of management are presented in published soil surveys. In any given year, yields may be higher or lower than those indicated in these tables because of variations in rainfall and other climatic factors. The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, or green manure crops; and harvesting that insures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. Absence of a yield indicates that the soil is not suited to the crop or the crop is generally not grown on the soil.

### **Productivity Index**

The productivity index rating system provides an index for ranking all the soil mapping units in Missouri based upon their suitability to produce crops. An individual productivity index rating for a soil map unit reflects the integrated effects of numerous factors that influence the yield potential.

Many users consider the comparative yields between soils to be of more value than the actual yields because the index relationships are likely to remain constant over a period of years.

*This subsection includes:*

- **(a) Land Capability and Yields per Acre of Crop and Pasture**
- **(b) Productivity of Missouri Soil (located in the county office)**

TABLE 6.--LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE

(Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Soil name and map symbol	Land capability	Tall fescue	Orchardgrass	Tall	Alfalfa hay	Switchgrass	Caucasian	Little
		hay	hay	fescue-red	Tons	pasture	bluestem	bluestem
		<u>Tons</u>	<u>Tons</u>	<u>clover hay</u>	<u>Tons</u>	<u>Tons</u>	<u>Tons</u>	<u>Tons</u>
02B----- Celt	IIIe	2.5	1.5	2.5	---	5.0	5.0	3.0
03C----- Wilderness	IVs	2.0	1.5	2.0	2.0	4.5	5.0	4.0
04----- Bado	IIIw	2.0	1.0	2.0	---	4.0	4.0	---
05----- Gerald	IIIw	2.0	1.5	2.0	---	4.0	4.0	---
06B----- Hoberg	IIIe	3.0	2.5	3.0	4.0	5.0	5.0	4.0
07B----- Lebanon	IIe	3.0	2.0	3.0	3.5	5.0	5.0	4.0
08B----- Viraton	IIIe	3.0	2.0	3.0	3.0	4.5	5.0	3.5
08C----- Viraton	IIIe	3.0	2.0	3.0	3.0	4.5	5.0	3.5
09B----- Hobson	IIe	3.0	2.0	3.0	2.5	4.5	5.0	3.5
09C----- Hobson	IIIe	3.0	2.0	3.0	2.5	4.5	5.0	3.5
14G----- Gepp-Goss- Bardley	VIIe	2.5	1.5	---	---	3.0	4.0	3.0
17D----- Gepp-Goss	VIe	2.5	1.5	2.5	2.5	4.0	4.0	3.0
18D----- Gasconade-Rock outcrop	VIIs	1.0	0.5	---	---	1.5	2.0	1.5
18G----- Gasconade-Rock outcrop	VIIIs	---	---	---	---	1.5	2.0	1.5
20C----- Ocie-Goss- Gatewood	IVe	3.0	2.5	3.0	3.0	4.0	5.0	4.0
20E----- Ocie-Goss- Gatewood	VIIe	2.5	2.0	2.5	---	4.0	5.0	4.0
24E----- Goss	VIIs	---	---	---	---	3.5	3.5	3.0

See footnote at end of table.

TABLE 6.--LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE--Continued

Soil name and map symbol	Land capability	Tall fescue	Orchardgrass	Tall	Alfalfa hay	Switchgrass	Caucasian	Little
		hay	hay	fescue-red	hay	pasture	bluestem	bluestem
		Tons	Tons	clover hay	Tons	Tons	pasture*	pasture
				Tons			Tons	Tons
25C----- Goss-Wilderness	IVe	2.5	1.5	2.5	3.0	4.0	4.0	3.0
33C----- Eldon-Keeno	IVe	2.5	2.0	2.5	3.0	4.0	4.0	3.5
42B----- Peridge	IIe	3.0	3.0	3.5	5.5	5.0	6.0	5.0
42C----- Peridge	IIIe	3.0	2.5	3.0	5.0	4.5	5.5	4.5
51B----- Claiborne	IIe	3.0	3.0	3.5	5.0	5.0	6.0	5.5
51C2----- Claiborne	IIIe	3.0	2.5	3.0	4.5	4.5	5.5	4.5
52B----- Hartville	IIe	3.0	2.5	3.0	---	5.0	6.0	3.5
55A----- Nolin	IIw	3.0	2.5	3.0	5.0	5.0	6.0	4.5
59A----- Racket	IIw	3.0	2.5	3.0	5.0	5.0	6.0	4.5
62B----- Sampsel	IIe	2.5	2.0	2.5	---	5.0	5.0	---
64A, 65----- Cedargap	IIIw	3.0	2.5	3.0	3.0	5.0	5.0	4.0
69----- Dunning	IIIw	2.0	1.5	1.5	---	4.0	4.0	---
72D----- Bolivar-Basehor	VIe	1.5	1.0	1.5	---	3.0	3.0	3.0

\* Similar yields can be expected for big bluestem and indiangrass.